

### **Status of the Claims**

Claims 1-7 are pending.

Claims 1-7 stand rejected.

Claims 1 and 7 have been amended without prejudice herein.

### **Remarks/Arguments**

Applicant requests reconsideration and allowance of the subject application for at least the following reasons.

#### **35 U.S.C. 101 Rejections**

Claims 1-7 stand rejected pursuant to 35 U.S.C. 101. The Office action argues, “the language of the claim raises questions as to whether the claim is statutory subject matter”. Applicant traverses these rejections, as Claims 1-9 are directed to, “[a] method for processing video data for display on a display device having a plurality of luminous elements.” Nonetheless, and without prejudice, Applicant has amended independent Claim 1 to recite, *inter alia*, “outputting the dithered video data to a display device.” Claim 7 has been amended to be independent in form and include the above-identified language. For purposes of completeness, Applicant notes support for this feature may be found throughout the specification, including, by way of non-limiting example in Fig. 3 and on page 13, lines 20-26 of the specification, where it teaches, “[t]he video signals R1, G1, B1 subjected to the dithering in the dithering block 12 are output as signals R2, G2, B2.” Accordingly, no new matter has been added.

In view of the foregoing, Applicant requests reconsideration and removal of the 35 U.S.C. 101 rejections of Claims 1-7.

#### **Claim 7**

As the only rejection presented with regard to Claim 7 was the 35 U.S.C 101 rejection, and as Applicant has amended Claim 7 to overcome the 35 U.S.C. 101 rejection, Applicant submits at least Claim 7 is in condition for allowance, an early notification of which is earnestly solicited.

### **35 U.S.C. 103(a) Rejections**

Claims 1, 2 and 4-6 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (United States Patent No. 6,421,466) in view of Frey (United States Patent No. 5,925,875). Claim 3 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Frey and further in view of Correa (European Patent Application No. EP1136974A1). Applicant respectfully traverses these rejections, and requests their reconsideration and removal for at least the following reasons.

Lin is directed to a method for compressing a digital-video sequence of images. Lin suggests that dithering methods can be used for reducing the width or number of bits of each pixel. Lin neither teaches nor suggests that the dithering improves the grey scale portrayal of video pictures of video data – as is recited by Claim 1.

The Office action argues Lin inherently “refines” grey scale of video data. In support thereof, the Office action relies upon the definition of “refine” as “to “reduce in vigor or intensity”. Applicant traverses this assertion for at least the following reasons.

During patent examination, the pending claims must be “given their broadest reasonable interpretation **consistent with the specification.**” See, e.g., *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005). The subject application teaches, in part, that dithering is used to artificially increase the number of displayed video levels, avoids the loss of amplitude resolution bits and improves the grey scale portrayal. Accordingly, while one definition of “refine” may be “to reduce in vigor or intensity”, such an interpretation of “refine” as used in the present claims is improper, as it is simply inconsistent with the specification. Rather, “refine” may be defined more consistently with the specification as: to become more fine or polished.

Nonetheless, for purposes of expediting prosecution of the subject application, Applicant has amended Claim 1 to recite, *inter alia*, “wherein the dithering improves the grey scale portrayal of video pictures of said video data.” Support for such a limitation may be found throughout the specification and

drawings as originally filed, such as at page 6, at lines 22-25 (*"The present invention proposes a method for processing video data for display on a display device having a plurality of luminous elements by applying a dithering function to at least part of said video data to refine the grey scale portrayal of video pictures of said video data."*), at page 2, at lines 16-19 (*"One known solution to improve the quality of the displayed pictures is to artificially increase the number of displayed video levels by using dithering."*), and at page 3, lines 23-29 (*"The dithering most adapted to PDP until now is the Cell-Based Dithering, described in the European patent application EP-A-1 136 974 and Multi-Mask dithering described in the European patent application with the filing number 01 250 199.5, which improves grey scale portrayal but adds high frequency low amplitude dithering noise. It is expressively referred to both documents."*). Accordingly, no new matter has been added.

Lin fails to teach, or suggest, that the dithering improves the grey scale portrayal. Instead, the Office action itself acknowledges that Lin averages pixels to produce a lower resolution. See, 3/14/2007 Office action, pg. 7, ll. 1-13. Accordingly, it is clear that Lin fails to teach, or suggest, dithering that improves a grey scale portrayal, as is recited by Claim 1.

Similarly deficient are the teachings of Frey. Frey does not apply a dithering function to at least a part of said video data to improve the gray scale portrayal of video pictures of said video data. The Frey dithering operation is instead used "to correct the gain and offset errors in the array of detectors". See, col. 2, ll. 9-11. The Frey dithering is used "to correct for differences in the responses of the individual image detectors forming the array". See, col. 1, ll. 13-16. Consequently, the Frey teachings are not useful for increasing the number of possible video levels (e.g., to improve the gray scale portrayal of video pictures of video data).

Furthermore, in the alternative embodiment illustrated by Figure 12, Frey discloses a dithering device filtering an image performing scene-to-scene registration to measure the object space motion and to estimate a dither pattern from that motion. See, col. 10, ll. 33-45. So, in this alternative, the motion may be

used to estimate a dither pattern, but is not used to change some parameters of the dither pattern (or the dithering function) as proposed in the present invention.

Finally, it should be noted that Frey is not even concerned with image display, but instead concerns image detection.

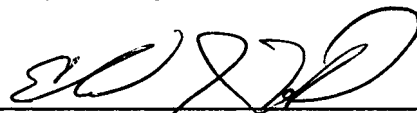
For the foregoing reasons, Applicant respectfully requests reconsideration and removal of the rejection of Claim 1. Applicant also requests reconsideration and removal of the rejections of Claims 2-6 as well, at least by virtue of these claims' ultimate dependency upon a patentably distinct base Claim 1.

### **CONCLUSION**

Applicant believes he has addressed all outstanding grounds raised by the Examiner and respectfully submits the present case is in condition for allowance, early notification of which is earnestly solicited.

Should there be any questions or outstanding matters, the Examiner is cordially invited and requested to contact Applicant's undersigned attorney at his number listed below. Should there be any fees due and owing the Patent Office is authorized to charge such fees to Deposit Account 50-3208.

Respectfully submitted,



Edward J. Howard  
Registration No. 42,670  
ph: 215-542-5824

c/o Thomson Licensing Inc.  
Two Independence Way  
P.O. Box 5312  
Princeton, NJ 08543